

Commonwealth Agriculture: Vibrant Economy, Thriving Communities, A Healthy Environment

Kentucky is a uniquely rural state. Our geology and geography have until now enforced a scale of agriculture and development that fostered numerous small communities. We have 120 counties - each county seat a theoretical day's ride from the next. We have more farms than any state east of the Mississippi River. Thanks to the cash crop tobacco, our rural economy has been maintained. Our farm products have a history.

Our cash crop is shrinking. The production of tobacco is being concentrated in fewer and stronger hands. The thousands of small-scale producers that knit the rural fabric of our Commonwealth are in need of replacement income. Any replacement enterprises should fit within the scale of the tobacco economy, use the existing agricultural land base, and provide a comparable income to tobacco.

While thousands of Kentucky farm families make their living as full-time producers, more than 50 percent of Kentucky farmers are part-time farmers. Farming accounts for less than 20 percent of the income of these farmers. Although markets for value-added products may eventually replace lost tobacco income, any plan for the long-term prosperity of rural Kentucky should make provisions for off-farm employment.

The Commonwealth has been blessed with both the political will and the financial means to redesign its rural economy. The preservation of our rural landscapes can be a valuable asset in preserving the social fabric on which rural economic health depends.

This plan seeks to adhere to three principles of sustainable development:

- Adding value to local agricultural products, exploiting market niches for pure and wholesome foods and promoting the rural landscape of Kentucky as an asset.

- Retaining the present scale and individual ownership of Kentucky agriculture by preserving working farms on Commonwealth farmland maintains our rural towns and communities.
- Minimizing the burdens on natural resources and rewarding good land stewards with a decent living will enhance the Kentucky environment.

There are three rural ecosystems in Kentucky - Eastern, Central and Western. Although the borders of these districts are not clearly defined, they are recognized by the residents. The state's long-term plan for agriculture should reflect these regional differences and provide solutions tailored to the local environment. The emphasis on certain enterprises in each area is not meant to proscribe other agricultural activity. There are tobacco farmers with 100,000 pounds of base in Eastern Kentucky. Western Kentucky has horses and tobacco. There are large-scale Central Kentucky grain farmers. What the plan attempts to identify are areas of concentration within each region.

East Kentucky

Timber

The Appalachian Mountains contain a significant hardwood reserve. More than ninety percent of this forest reserve is privately owned. Few of these owners actively manage their forests. Most of the trees are exported from Kentucky as logs. Kentucky timber competes in a global market. To capture value in this market we must recognize the worth of our hardwoods, improve our management of this asset, and improve our processing infrastructure. Our woodlands are undervalued and neglected. State foresters should undertake a county-by-county inventory using new digital and global positioning technology. This information should be catalogued in a state database.

There are excellent furniture craftsmen in the area. A furniture factory using craft association designs to manufacture Kentucky reproductions advertised for sale in literary and architectural journals could be the foundation of a high-end furniture industry. The Economic Development Cabinet and the Kentucky Department of Agriculture should continue to explore the market for furniture and other large-scale craft production.

Valuable symbiotic crops such as ginseng and mushrooms can provide a reward for good stewardship and should be encouraged. Funds should be made available for woodlot demonstration projects and to develop markets for these types of products.

Kentucky has more than 20 kinds of edible wild mushrooms. Shiitake and morels grow well in our woodlands and can return as much as \$1000 per acre



at harvest. New inoculants minimize the amount of labor needed to harvest a mushroom crop. A state database could connect restaurants and wholesalers with Kentucky mushroom producers.

Kentucky is a leading supplier of wild ginseng. Mature ginseng can bring \$400 per pound. The introduction of a market for “virtually wild” ginseng could provide a vehicle for establishing an Internet auction system and setting industry standards. Efforts to promote and create a transparent market for “virtually wild” ginseng should be encouraged.

Livestock, Vegetables and Other Opportunities

In the livestock industry, efforts are underway to provide market venues for preconditioned feeder cattle and the area's growing goat herds. ADB programs provide cost share dollars to upgrade herd genetics, build handling facilities and improve forage management. Eastern Kentucky initiatives like the Heifer Development Project complement efforts in other parts of the state to improve market opportunities for all types of livestock.

Cumberland Farm Products, a strong vegetable cooperative, is the heart of East Kentucky vegetable production. The cooperative has been awarded ADB grants for expansion. Diversification grants are available to new vegetable growers. The cooperatives should actively recruit new members as a condition of this funding.

Eastern Kentucky has good soils and growing conditions for wine grapes. The Equus Run Winery is recruiting growers in Eastern Kentucky. There is a ready demand for blackberries, strawberries and raspberries. Kentucky regional certified kitchens will let farmers convert these and other fruit and vegetable crops into value-added farm products. After KDA certification, these products could be available for sale on websites such as Kentuckyvirtual.com and included in a state database of agricultural products.

Tourism

The trend toward healthier living is illustrated by the growing amounts of money spent on health and sport. As people live longer, they are more concerned about health. A recreational infrastructure that makes use of Kentucky's rural landscape can attract both tourists and retirees. The Pine Mountain Trail is an excellent start toward a state-wide trail system. Kentucky projects are part of a national movement to develop hiking, cycling and horseback riding trails. A Kentucky trail from Pine Mountain to the Virginia Creeper Trail, which is just over the border in Wise County, Virginia, would connect Kentucky to the Appalachian Trail that runs

from Georgia to Maine. There is an extensive trail system including the John Muir Trail in the Daniel Boone Forest. The Mississippi River Trail runs through western Kentucky. West Virginia and North Carolina are developing trail systems.

A costs/benefits study of a state system to connect the major national trails in the state should be undertaken. Such a trail system could provide the infrastructure to support rural businesses including outfitters, tour agencies, tour guides, livery stables, bed and breakfasts, restaurants, bicycle shops and produce stands. The trail systems of England and Ireland are examples of the economic potential of walking, cycling and horseback riding tourism.

Both private and public initiatives support agri-tourism in the state. The South East Coal Company store at Seco has been converted into a winery, music venue and bed and breakfast. The Kentucky Department of Agriculture is developing an agri-tourism plan. These efforts should be supported and encouraged.

Information Technology: Knowledge-Based Small Farm Income Supplement

Many farmers or their spouses work off the farm to secure health insurance and extra income. For example, tech support, the person who answers questions about your new computer, provides jobs in East Kentucky. This is entry-level information technology. Information technology is non-polluting. The wages are adequate and companies offer health insurance. These companies can provide entry-level knowledge worker positions, farm family health insurance and the supplemental income to help keep rural communities intact. A coordinated effort with the Economic Development Cabinet is needed to find other non-polluting businesses that can supplement farm incomes.

Knowledge workers are the key players in the emerging information age economy. Knowledge workers have two basic needs: formal education to fit them to knowledge work and continuing education to keep that knowledge up to date. Much of continuing education can now be delivered electronically. A

radiologist or critical care nurse can practice their craft in any properly equipped facility. A programmer may need only a fast Internet connection to do their work. Sophisticated knowledge industries in the mid-twenty-first century will likely be able to locate wherever they can find and keep the knowledge workers necessary to run their operations.

The effort to preserve the rural landscape and human scale of the Commonwealth will complement the major investment Kentucky has made in education and provide another valuable recruiting tool for knowledge industries.

Central Kentucky

Horses

Horses are the premier agricultural product of the Commonwealth. The home of fine Thoroughbreds is an image projected by Kentucky to the rest of the world. The national and international horse operations in Central Kentucky support a large and profitable industry that includes veterinarians, farriers, feed dealers, trainers, grooms and others. The state should remain sensitive to the needs of the horse industry.



Pleasure horse numbers are growing. There are more gaited horses and Quarter Horses in Kentucky than Thoroughbreds. The development of county markets for horse quality hay should be encouraged. A trails initiative could boost the state's horse industry by opening new markets.

Tobacco

Tobacco will continue to be an important crop for Kentucky. Central Kentucky is the Commonwealth's Burley Belt. Farmers in the Licking River Valley, the Bluegrass Plateau and Barren River Basin will continue to grow the lion's share of Kentucky tobacco. The burley infrastructure is well developed in these areas.

The burley tobacco marketing system is changing. Cigarette companies are substituting grower contracts for the traditional auction system. By refusing to employ USDA tobacco graders, these companies could cause the loss of federal price supports and quota control for tobacco. Other companies have been willing to use USDA graders. Farmers will have a referendum in 2002 on the issue of USDA grading. Regardless of the outcome of this vote, the state should work with the Burley Tobacco Cooperative to see that the tobacco market system is fair and open and protects the economic interests of Kentucky farmers.

Hundreds of millions of dollars have been provided to tobacco quota holders and growers since the establishment of the National Tobacco Growers Settlement Trust (Phase II). Since December 1999, federal payments through the Tobacco Loss Assistance Program and annual payments from the Growers Settlement Trust will have provided by December 2001 over \$650 million in direct, unrestricted cash payments exempt from state income tax. Farmers are urged to use these resources to match Phase 1 money available to strengthen local agricultural enterprises.

Forages and Hay

The most direct route to improving animal performance is by improving forage management. Our pastures are dominated by Kentucky 31 fescue. Extension surveys estimate 8 million acres of fescue in the state.

The endophyte associated with Kentucky 31 fescue protects the plant at the expense of the animal. Eating endophyte-infected fescue raises cattle

body temperature in the summer and causes reproductive problems in both cattle and horses, according to University of Kentucky agronomists. When cattle are allowed unrestricted access to pasture they tend to select more palatable species such as clovers and other cool season grasses.

Innovative farmers have demonstrated that a rotational grazing regimen, one that mimics the natural movement of grazing herds to fresh pastures, encourages a healthy mixture of grasses and clovers in pastures and increases weight gain in all forms of grazing livestock. Rotational grazing, pasture renovation and soil-building techniques should be included in farm demonstration projects throughout the state.

Less than 15 percent of the hay used in the horse industry is from Kentucky, according to the Kentucky Department of Agriculture. The horse industry demands hay that has been properly cured, because a single moldy spot can result in a large vet bill or worse. Investments in improved forage production and handling practices could help open the horse hay market to Kentucky farmers. Efforts to create state certified hay markets should be renewed.

Feeder Cattle

Kentucky is the largest feeder cattle producer east of the Mississippi River. Because of favorable weather, soils, topography (and assuming the proper management of our forage base) Kentucky's feeder cattle production cost could be among the lowest in the U.S. The Beef Quality Initiative, the Kentucky Beef Network and the Master Cattleman program are part of a coordinated effort by the beef industry to address quality assurance concerns. These programs are raising the value of Kentucky cattle and should be supported and encouraged.

Kentucky is participating in the Five State Beef Initiative (FSBI). This system is designed to create an information-driven beef supply chain based on the electronic identification of each animal in that chain. This initiative is being driven by food safety, environmental considerations, and humane handling requirements in addition to traditional tenderness, flavor and leanness criteria. Major beef purchasers

including Burger King and McDonald's are already mandating higher environmental and humane standards. Participation in this system will increase rural incomes by allowing farmers to fill demands from premium feeder cattle markets for a certified calf from a verified source. This joint venture of the University of Kentucky, Western Kentucky University, the Kentucky Department of Agriculture, the Kentucky Cattleman's Association and Kentucky Farm Bureau should be encouraged. Similar quality control measures to include the states that are traditionally the market for Kentucky feeder cattle should be explored.

Lexington has one of the ten largest cattle markets in the U.S. at Bluegrass Stockyards. The stockyard is owned by e-Merge, an online cattle market. Internet, video, tele-auctions and graded pool sales make it possible for farmers or groups of farmers to sell pot loads of cattle. A pot load is 50,000 pounds - the legal capacity of a commercial trailer or pot. This is the package feedlot operators require. Traditionally, order buyers have put together pot loads by bidding on individual animals at a sales facility and adding value using the facility's pen space to group them in load lots. Video and Internet auction cattle might have come from 10 small herds and yet never set foot in a sale barn. This limits stress on animals and minimizes shipping fever and allows the cattle owner to capture added value.

Meat for Local Markets

Demand for farm-raised meat and poultry is growing as food safety concerns increase. Kentucky is in a good position to meet this demand. We have an excellent potential forage resource and a strong history of animal husbandry. A decentralized system of small-scale animal processors, or abattoirs, seems best suited for this trade.

Kentucky has 23 abattoirs that are inspected by the USDA for food safety compliance. Several of these plants are working with producers on branded products. These companies should be encouraged to upgrade facilities to maintain USDA compliance, to add lines for other species such as chicken and to search for innovative offal solutions.

Vegetables

We have major commercial vegetable markets in Kentucky. The nation's largest supermarket chain, Kroger, is headquartered in Cincinnati and has a major distribution center in Louisville. Wal-Mart has a produce distribution center in London. Castellini, a large wholesaler, is headquartered at Wilder and has a packing operation at Dry Ridge. Representatives from these companies have said they would like to increase their use of Kentucky produce. Kentucky should explore cooperation with these and other local businesses before recruiting outside interests.

To date few producers have been able to supply the quantity and quality demanded by these markets. Growers need training to succeed in vegetable production. Production and harvesting require precision to preserve the quality demanded by the market. Only top quality produce can be packed for sale. Present grower education programs should be expanded and should include trips to see successful growers and visits to successful packing operations.

There are many tobacco greenhouses in Kentucky that are used for only a small part of the year. According to the Energy Information Administration, Kentucky has the fourth lowest electric utility rates in the nation. Programs to retrofit these greenhouses to grow winter vegetables and flowers using our cheap electricity should be explored.

The fresh vegetable market is thriving. Farmers' markets exist in most county seats. There are 68 municipal markets and 44 roadside stands in the state. Restaurants advertise Kentucky fresh produce. A system of Kentucky Certified kitchens organized at the county and regional level would provide certified produce for farmers markets and ways to enter commercial markets. On-farm processing opportunities should be fully explored.

West Kentucky

The farm economy from the Mississippi River Alluvial Plain to I-65 is more like that of midwestern farms to the north and west of Kentucky. The farms are larger. Agricultural commodities like corn and

soybeans are major contributors to the farm economy. Farmers are less tobacco-dependent. Western Kentucky farmers have formed strong farm cooperatives like the Hopkinsville Grain Elevator. This co-op is developing a \$32 million dollar ethanol plant. Western Kentucky Growers Cooperative had produce sales this year of over \$3.7 million. The Purchase Area Aquaculture Cooperative has built a processing plant and is developing a market for fresh catfish and other products.

Value-Added Grain

Christian County Grain Company is expanding its capacity to clean food-grade corn from 200 bushels per hour to 500 bushels per hour. This will increase the number of farmers who can command a premium price for corn. Christian County Grain was the first supplier of corn to Golden Flake Foods for chips. The third generation family elevator has grown from a 15,000-bushel capacity in 1953 to over a million-bushel capacity today. Markets for edible soybeans and other food grade corn products should be explored.

Horticulture

Successful vegetable growers' associations and cooperatives should continue to be supported. Virtually all of the nursery stock in Kentucky is imported. Ways of opening the \$20 billion market for trees and ornamentals to Kentucky growers should be encouraged.

Other Opportunities

Bio-diesel production, manufacturing renewable fuel from vegetable oils or recycled restaurant grease, should be explored. City, state and county fleets could provide demand for a pilot bio-diesel project.

